

Jacob Van Dusen.

Prinyer's Cove, Prince Edward Co., Ont.,

September 26, 1893.

Has been engaged in fishing 18 years.

Fishes mainly outside, about South Bay Pt. or Point Traverse, but in the fall fishes in the Bay of Quinté. Fishes chiefly for whitefish, and to a slight extent for salmon trout.

Has not noticed much difference in the abundance of whitefish until this year, when the catch has been pretty light. Has fished in the Bay of Quinte during the past 8 or 10 years, and last year (fall of 1892) did as well as ever.

The Lake Ontario Fish Co. of Cape Vincent, N. Y., buys all his fish.

Salmon trout fishing at the Main Ducks was better in 1892 and 1891 than ever before. There were not so many fishing, but those who

did made large catches.

Thinks that the supply of whitefish and salmon trout has been kept up by artificial hatching.

Take a few black bass and pike in the gill nets, when fishing in depths of 8 to 10 feet. They fish in the bay off Prinyer's Cove in depths of 8 to 150 feet. About the False Ducks whitefish are taken in depths of 20 to 120 feet. All of the above fishing is done with gill nets.

At the False Ducks the whitefish come into shoal water, on bars with a stone bottom, in June. They seem to get there a peculiar kind of food, which he said was a worm about one inch long. Has seen them in these places in June with nearly ripe spawn, but has never seen the spawn running from them there. Has considered that they spawned at that time because of their coming into shoal water.

In the Bay of Quinte the whitefish spawn

in November.

At the head of the Bay of Quinté they have hauled seines in November, in the past, for the capture of herring, but have also taken whitefish in large quantities. This was between Deseronto and Trenton. Thinks that seines were so used last fall, and had heard that the fishery overseer was paid to keep away at that time. Thinks that this practice has done most harm to the whitefish, as they are taken during the spawning season.

According to what he has heard, fishing used to be better before he began fishing, than it has been since, but since he began there has been no special change in the abundance of fish.

Mr. Van Duzen attempted in the beginning to create the impression that there had been no decrease in fish, as though he feared in acknowledging such a decrease some restrictions would be placed upon his fishing.

Subsequently, however, when he got onto the subject of the use of seines in the upper part of the Bay, he talked about the great decrease which had taken place in the abundance of whitefish.

Other fishermen who were present at the same time said to us afterward that, according to their experience, the fishery had declined greatly during recent years. They also agreed that the seining in the upper part of the bay had done much harm. It is carried on during the height of the spawning season. The whitefish do not reach the extreme upper part of the bay until that time in the fall, and cannot be taken there at any other season.

Mr. Van Duzen, when fishing from Prinyer's Cove, sometimes makes use of old gill nets, no longer strong enough to set in deep water, to set them in shallow water close in shore, for such coarse fish as black bass, pike, etc. There is a good demand for such fish and the

price is sufficient to induce him to engage in the business occasionally.

Prinyer's Cove, Prince Edward Co., Ont.

September 26, 1893.

Notes taken at the wharf below the house of Mr. John Prinyer, 20 miles from Picton. Several fishermen have their gill net reels here, land their fish at this point, and the tug calls for them here. The fish are taken by the Lake Ontario Fish Co., of Cape Vincent, N. Y.

The fishing with gill nets at this place is carried on directly off the mouth of Prinyer's Cove, not far from shore, but in depths ^{down to} ~~at~~ about 150 feet, mud bottom.

One net had just landed 14 and another 36 whitefish, as the result of the previous night's fishing. The latter catch also contained one good sized pike and 4 medium small-mouth black bass. I have found no large mouths among the few black bass I have examined so far.

The largest whitefish weighed about 2 pounds. The whitefish had gilled in different places, dependent upon their size; some just back of head, and some way back by the anal fin, being only just held by this fin. One was small enough to have gone through the mesh, but the twine had been around the body in several places from head to tail. He had evidently turned and twisted several times after first getting into the net, and had thus fastened himself in several meshes.

The mesh of the gill nets in use here measure 4 $1/2$ inches, extension. The nets, are 12 meshes deep, and, therefore, slightly more than 4 feet deep when stretched. The webbing is bought by the pound, and is fitted by the fishermen. It consists of Scotch linen. The float and lead line are of cotton twine. The floats are of wood, and the sinkers small cylinders of lead.

They take eels, "shad" (alewives) and young

whitefish occasionally, by their getting a thread of the mesh in their mouths, and becoming thus entangled in the net.

The average size of the whitefish taken in these gill nets was said to be about 2 pounds, (not dressed). A whitefish weighing 1 1/2 pounds will go through the mesh. May sometimes be caught or held, however, by the back fins. Rarely may get one weighing 4 or 5 pounds.

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Robert Miller, Cape Busy.

Outer or lake shore of Prince Edward Co., Ont.

September 26, 1893.

This place is on the opposite side of the point, and about 4 miles from Prinyer's Cove; to the east of Waupoose Island. There is a good landing here, and a large display of gill nets, wound upon reels. Some others fish from this place, but we saw only Mr. Miller. He is a farmer and has a large place here. Has fished for only a few years, but can speak for the fishery of the region during the past 30 years. He has always belonged here. He is a very intelligent man.

No seining has ever been carried on in this immediate region, as the beaches are not suited for it, and the fish do not come in near enough to the shore.

Whitefish are not nearly so abundant now

as they used to be.

Many claim that the appearance of the so-called "shad" has ^Ypro_Aduced a detriment to the whitefish.

As long as 30 years ago gill nets, and gill nets only, were used in this region for taking whitefish and salmon trout. For the former species used then 4 1/2 inch mesh, and for the latter 6 inch mesh (extension).

Whitefish were taken then on the same grounds as now, namely, between Waupoose Island and the center of the upper gap (west of Amherst Island), and in depths of 10 to 90 feet.

They begin fishing in March as soon as the ice goes out, in depth of about 60 feet. The fishing has always been continued through the entire year, until the ice formed again, until the close season began to be enforced.

Whitefish are most abundant from July 1 to September 1, and that has always been the best

season.

There was no market for fish in those early days, and the men just fished enough to make a living out of it.

They used less net then than now, and their nets were made of coarser twine.

One whitefish net now weighs from 15 to 20 pounds, according to the size of the twine. One pound of fine twine will make 18 to 20 rods of net.

Only fished at intervals in the early days, and mostly in the fall, when the fish could most readily be salted down and kept. Did not then fish in the winter.

Now the majority fish also in the winter in the Bay of Quinté, although Mr. Miller does not. He fishes only from March to November, since the latter month was made a close season. They cannot fish in the winter on the outer lake shore.

The whitefish they are taking now are not

of the same kind they took originally, and he considers them to be the result of artificial planting.

Twenty years ago fishing was still good, but not as good as it had been before.

During a period of 7 years, terminating 5 or 6 years ago, the quantity of fish was so small that it was not worth while to engage in fishing. About 8 years ago was the time of the poorest fishing. About 3 years later they came back in larger numbers, and he regards that as the result of planting fry.

Thinks the decrease had been due to the appearance of the "shad" and perhaps to other species, which may have been introduced.

During the past 5 years there has been good fishing up to this year. Two years ago the summer fishing was especially fine.

There are several kinds of fishes in the lake now which did not use to be there originally. Among these are the "bloats" and "blue backs."

Old fashioned whitefish averaged about 1 $\frac{3}{4}$ pounds each in weight. They have been larger this year, the average being about 2 pounds. Two years ago they averaged about 1 $\frac{1}{2}$ pounds each. These weights are for the dressed fish. All the whitefish brought in here are dressed.

Some of the outside fishermen fish in the Bay of Quinté in the winter, using the same appliances. They are set under the ice.

Each kind of fishing net is licensed separately.

Pound nets are not allowed in this region.

Hoop nets are not employed along the lake shore in this place.

Salmon trout used to come onto the shoals from October 10 to November 15. Not many could be obtained before or after those dates.

Gill nets having a 6 inch mesh were used to capture them. They fished them on the same

ground as they fished for whitefish, but there are no whitefish in those places now.

There is no salmon trout fishery in this district now, as the species is not sufficiently abundant. The fishery has been a failure for about 20 years. A fisherman might get enough for his own use, but no more.

Thinks that the failure of the inside salmon trout fishery may be partly due to so much summer fishing for that species in the outer waters. It was not carried on originally, but was inaugurated over 20 years ago. This fish has not come into shallow water since that time, and the fishery played out rapidly.

A few salmon trout come in during the close season (November), but they cannot fish for them then. Last year (1892) Mr. Miller caught about 100 pounds of these trout.

The summer fishery for salmon trout has been about the Main Ducks, and off Salmon Pt.,

where it is still carried on. Very many were caught there last summer (1892) and a year ago last summer.

Perch and black bass occur on hard bottom. They use smaller mesh gill nets during August, September and October for perch, bass, pickerel, blue pike, suckers, etc., and fish them inshore in depths of 10 to 30 feet.

A varying number of men come into this cove (at Miller's) to fish during the summer. There have been 6 or 7 large boats and several smaller ones here at a time. The larger carry 2, the smaller 1 man each.

Whitefish do not spawn on this part of the lake shore now. They used to come right in shore here in abundance for that purpose. Mr. Miller claims that the whitefish they get now belongs elsewhere. It is a mud bottom spawner, and does not come onto the hard white bottoms to spawn. They can be caught on mud during the spawning season now, but not on hard bottom.

The fry planted in Lake Ontario came from Lake Erie eggs.

Thinks it would not be possible to get spawning whitefish here now in sufficient quantity for hatching purposes.

The whitefish used to spawn about here in depths of 10 to 30 feet, and they used to catch them in ripe spawning condition. There is a sand bar off this place on which they used to spawn. They spawned during the entire month of November and chiefly within that month. Cleared out from the bars as soon as they were through spawning. Then went on to mud in deeper water.

Salmon trout spawned on the same ground as the whitefish, but the heft of the spawning took place between October 15 and November 15. A few spawned before and after. The close season now enforced is too late to protect them

Never caught more than an occasional salmon trout after November 15. The fish then

went outside of the limits of their fishery. At that time they were not in the habit of fishing more than 2 miles from shore. Now they fish out 4 and 5 miles, and farther.

The salmon trout were mostly gone before the whitefish came in abundantly to these spawning grounds. A few salmon trout only came in to spawn in these same places.

The whitefish feed on little worms, about 1/2 inch long, which live on the weeds. This is principally during July and August (These so-called worms may have been Amphipods or leeches. See observations made at Port Hope, Ont.). In the spring they feed on snails and all sorts of stuff. Never saw young fish or eggs in their stomachs.

Bloats were first taken in this region about 4 years ago.

(I examined two specimens caught by Miller this morning. They measured a trifle over 12 inches long. The lower jaw projects,

while it is shortest in the whitefish. The configuration of the head is different in these two species. The body of the bloat is more symmetrical than that of the whitefish, but very much like it; the fins are the same and placed about the same. The scales are somewhat smaller in the former. The belly sticks out prominently, perhaps cause of name).

(They opened about 2 dozen whitefish, nearly all of which were females. The spawn was in all conditions, from very immature to nearly ripe. The stomach is provided with a gizzard, somewhat like the menhaden. We found only a little food. It consisted mostly of small crustaceans, amphipods, some small bivalve shells, and apparently some vegetable matter. A quantity of the stomach contents was preserved by Prof. Prince).

(The herring, of which there were several specimens, were slightly larger than the whitefish, with lower jaw projecting. They were

called blue backs).

Mr. Miller says that the cisco will grow to about the size of the bloats, but are more slender.

The black bass will follow a net leader, and hoop nets sometimes take large quantities. They also mesh quite readily, a 4 inch (ext.) mesh being about right for them, but there are not many black bass out in the lake where he fishes.

The bloats are dry in flesh. They are marketed where the people do not know much about whitefish. They have been sold as herring this year. The Cape Vincent Co. purchases them now in consideration of the scarcity of whitefish.

Never saw the so-called "shad" in winter. They die mostly in June. They attain a much larger size than those commonly seen dead. Does not know where they winter. They have been here only a few years. Thinks they were

introduced by Seth Green.

Three genuine shad were caught here last year, and 2 the year before, Had never seen them before.

Had heard a man say that he had taken sea salmon up by Cobourg, but that was before Mr. Miller's time. He has never see any.

The ling used to be abundant, but are becoming scarce. Has taken only 2 specimens this summer.

The whitefish are sent from this region to Cape Vincent. The coarse fish are sent from Waupoose Island to Oswego. A tug comes for them. They are taking and marketing more coarse fish now, since whitefish are becoming less abundant.

Suckers are very abundant in this region, and large quantities are taken in the nets. They are a nuisance when fishing for whitefish, and they do much damage to the nets.

The smallest eel he has seen measured

about 10 inches long, and was about as big
around as one's little finger.

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